Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the specification:

Listing of Claims

1. (original) A method of assaying for C-mannosyltransferase (CMT) activity, said method comprising the steps of:

i) providing CMT and a CMT substrate,

ii) providing conditions conducive to forming a C-mannosylated CMT substrate by action of said CMT on said CMT substrate,

iii) immobilizing said C-mannosylated CMT substrate and

iv) detecting said C-mannosylated CMT substrate.

2. (original) The method according to Claim 1, wherein said immobilizing step (iii) comprises expressing a cell surface bound CMT substrate on a cell.

3. (currently amended) The method according to claim 1 ~~or claim 2~~, wherein said C-mannosylation of said substrate is detected using an antibody.

4. (original) The method according to claim 3, wherein said antibody is specific for C-mannosylated CMT substrate.

5. (currently amended) The method according to claim 1 ~~or 2~~, wherein said C-mannosylation of said substrate is detected using a label.

6. (currently amended) The method according to ~~any one of the preceding~~ claim~~s~~ 1, wherein a fusion protein comprises the C-mannosylated substrate.

7. (original) The method according to Claim 6, further comprising cleaving said fusion protein with a protease.

8. (currently amended) A method of identifying an agent effective in modulating C-mannosyltransferase (CMT) activity, said method comprising the steps of the method of ~~any one of the preceding~~ claim~~s~~ 1 in the presence of an agent.

9. (original) A method of identifying an agent effective in modulating C-mannosyltransferase (CMT), said method comprising the steps of:

i) contacting a cell comprising CMT with an agent,

ii) detecting CMT activity, and

iii) determining the agent-induced modulation in the CMT activity relative to when said agent is absent.

10. (original) The method according to Claim 9, wherein said modulation is inhibition of CMT activity.

11. (original) The method according to Claim 9, wherein said modulation is activation of CMT activity.

12. (currently amended) The method according to claim 9, ~~10 or 11~~, wherein said detecting step in (ii) comprises expressing a cell surface bound CMT substrate in said cell and detecting C-mannosylation of said substrate.

13. (currently amended) The method according to Claim 9, ~~10 or 11~~ wherein said C-mannosylation of said substrate is detected using an antibody.

14. (currently amended) The method according to Claim 9, ~~10 or 11~~ wherein said C-mannosylation of said substrate is detected using a label.

15. (currently amended) The method according to ~~any one of~~ Claim~~s~~ 9 ~~to 14~~ wherein a fusion protein comprises the C-mannosylated substrate.

16. (original) The method according to Claim 15, further comprising cleaving said fusion protein with a protease.

17. (currently amended) The method of ~~any one of~~ Claim~~s~~ 9 ~~to 16~~, said method further comprising detecting the presence of a GPI anchor.

18. (original) A method of identifying an agent effective in modulating C-mannosyltransferase (CMT), said method comprising the steps of:

(a) providng a non-human wild-type or genetically engineered animal comprising a CMT gene;

(b) administering an agent to the non-human transgenic animal; and

© determining whether CMT activity is affected relative to when said agent is absent.

19. (currently amended) An agent identified by ~~any one of~~ Claim~~s~~ 9 ~~to 18.~~